

Terminology for Discussing Elasticities

Multiple-Choice Questions

Topic: elasticity terminology
Type: factual
Answer:
Difficulty: basic

1. If a product has an inelastic demand, this means that
- consumers are relatively sensitive to a change in the price of the product.
 - consumers are relatively insensitive to a change in the quantity demanded.
 - producers are relatively sensitive to a change in the quantity demanded.
 - producers are relatively insensitive to a change in the quantity demanded.
 - consumers are relatively insensitive to a change in the price of the product.

Topic: elasticity terminology
Type: factual
Answer:
Difficulty: basic

2. If a product has an elastic demand, this means that
- consumers are relatively insensitive to a change in the price of the product.
 - consumers are relatively sensitive to a change in the quantity demanded.
 - consumers are relatively sensitive to a change in the price of the product.
 - producers are relatively insensitive to a change in the price of the product.
 - producers are relatively sensitive to a change in the quantity demanded.

Topic: elasticity terminology
Type: conceptual
Answer:
Difficulty: moderate

3. If the price of a product increases by 10 percent and the quantity demanded decreases by 15 percent, then
- the product has an inelastic demand.
 - the producer should raise the price further to increase total revenue.
 - the product has an elastic demand.
 - the product has an elastic supply.
 - the product has a unit-elastic demand.

Topic: inelastic demand
Type: factual
Answer:
Difficulty: basic

4. For demand to be inelastic,
- the percentage change in quantity demanded must be greater than the associated percentage change in price.
 - the percentage change in quantity demanded must be less than the associated percentage change in price.
 - the percentage change in quantity demanded must be equal to the associated percentage change in price.
 - quantity demanded must change with a change in price.
 - demand must change with a change in price.

Topic: elastic demand
Type: factual
Answer:
Difficulty: basic

5. For demand to be elastic, it must be the case that
- the percentage change in quantity demanded is greater than the associated percentage change in price.
 - the percentage change in quantity demanded is less than the associated percentage change in price.
 - the percentage change in quantity demanded is equal to the associated percentage change in price.
 - quantity demanded must change with a change in price.
 - demand must change inversely with a change in price.

Topic: unit elastic demand
Type: factual
Answer:
Difficulty: basic

6. When demand to be unit-elastic,
- the percentage change in quantity demanded is greater than the associated percentage change in price.
 - the percentage change in quantity demanded is less than the associated percentage change in price.
 - the percentage change in quantity demanded is equal to the associated percentage change in price.
 - quantity demanded must change with a change in price.
 - demand must change inversely with a change in price.

Topic: elasticity terminology
Type: factual
Answer:
Difficulty: moderate

7. If a 3 percent change in price results in a 1.5 percent change in quantity demanded, then the price elasticity of demand is _____ and demand is _____.
- 2; elastic
 - 1/2; elastic
 - 2; inelastic
 - 1/2; inelastic
 - 1; unit-elastic

Topic: elasticity terminology
Type: factual
Answer:
Difficulty: basic

8. If the price elasticity of demand is 5.3, demand is said to be
- elastic.
 - inelastic.
 - unit-elastic.
 - perfectly inelastic.
 - perfectly elastic.

Topic: perfectly inelastic
Type: conceptual
Answer:
Difficulty: moderate

9. Carla buys one soft drink a day regardless of the price. Which of the following statements is correct with respect to Carla?
- Price elasticity of demand for soft drinks is zero.
 - Price elasticity of demand for soft drinks is 1.
 - Cross-price elasticity of demand for soft drinks is 1.
 - Price elasticity of demand for soft drinks is infinite.
 - Price elasticity of demand cannot be calculated with the information given.

Topic: perfectly inelastic
Type: factual
Answer:
Difficulty: basic

10. If demand is perfectly inelastic, then
- the elasticity of demand is 1.
 - the elasticity of demand is -1.
 - the demand curve will be nonexistent.
 - the demand curve will be a horizontal line.
 - quantity demanded does not change when price changes.

Topic: perfectly elastic
Type: factual
Answer:
Difficulty: basic

11. A perfectly elastic demand curve has a price elasticity
- of infinity.
 - that varies between 0 and 1.
 - less than 1.
 - equal to 1.
 - equal to zero.

Topic: relative elasticity
Type: factual
Answer:
Difficulty: basic

12. Suppose one market demand (D_1) has a price elasticity of 0.65 and a second market demand (D_2) has a price elasticity of 0.89. In comparing price elasticities of demand, it is proper to say that
- D_2 is inelastic compared to D_1 .
 - D_2 is elastic compared to D_1 .
 - D_2 is more elastic than D_1 .
 - D_2 is more inelastic than D_1 .

Topic: relative elasticity
Type: factual
Answer:
Difficulty: moderate

13. Suppose the price elasticity of demand for apples is 2.3 and the price elasticity of demand for housing is 0.65. In comparing price elasticities of demand, it is proper to say that
- the demand for apples is less elastic than the demand for housing.
 - the demand for apples is inelastic; for housing it is elastic.
 - the demand for apples is more inelastic than the demand for housing.
 - the demand for apples is more than three times as inelastic as the demand for housing.
 - the demand for apples is more elastic than the demand for housing.

Topic: perfectly inelastic
Type: factual
Answer:
Difficulty: basic

14. When the demand curve is a vertical line, demand is
- perfectly inelastic.
 - unit-elastic.
 - relatively elastic.
 - infinitely elastic.
 - cross-elastic.

Topic: perfectly elastic
Type: factual
Answer:
Difficulty: basic

15. A horizontal demand curve is
- unit-elastic.
 - relatively inelastic.
 - perfectly inelastic.
 - relatively elastic.
 - perfectly elastic.

True-False Questions

Topic: elastic demand
Type: conceptual
Answer:
Difficulty: basic

16. If the percentage change in quantity demanded is greater than the percentage change in price for a good, then the demand for the good is elastic.

Topic: elasticity terminology
Type: factual
Answer:
Difficulty: basic

17. If demand is elastic, the price elasticity of demand is between zero and 1.

Topic: elasticity terminology
Type: factual
Answer:
Difficulty: basic

18. For one to accurately say that the demand for good X is more elastic than the demand for good Y, it must be the case that the price elasticity of demand for good X is greater than the price elasticity of demand for good Y. It does not matter whether either of the elasticities is greater than, less than, or equal to 1.

Elasticity of Demand

Multiple Choice Questions

1. Elasticity of demand is a numerical measure of
 - a the slope of the demand curve
 - b the ratio of percentage changes in quantity and price
 - c the relationship between equilibrium price and equilibrium quantity
 - d the willingness of consumers to purchase commodities

2. The price elasticity of demand for a good depends on
 - a the income of buyers
 - b the quality of the good
 - c the quantity supplied
 - d the availability of substitutes

3. Elastic demand implies that a given percent
 - a increase in price causes a smaller percent decrease in the quantity demanded
 - b increase in price causes a larger percent decrease in the quantity demanded
 - c decrease in price causes a smaller percent increase in the quantity demanded
 - d ~~increase~~ in price causes a larger percent increase in the quantity demanded

4. If the price elasticity of demand for a commodity is zero, then a small change in its price will result in
 - a a small change in quantity demanded
 - b no change in quantity demanded
 - c a complete withdrawal of quantity demanded
 - d none of the above

5. An increase in the price of bus tickets leads to an increase in the income of bus companies; this shows that
 - a there is a high elasticity of demand for bus trips
 - b there is a low elasticity of demand for bus trips
 - c buses are inefficient
 - d there are traffic bottlenecks

6. If the price per unit for a good with unit elasticity of demand is \$10 when the total sales is 100 units, what will the price have to be for sales to be 120 units (*approx.*)
 - a \$6.70
 - b \$7.50
 - c \$8.30
 - d \$8.70

7. If consumers spend a fixed amount of money on commodity X within a given price range then their demand for X within that price range is

- a in equilibrium
- b perfectly elastic
- c unitary elastic
- d perfectly inelastic

8. A 10% increase in the price of butter leads to a fall in the quantity of butter demanded of 5%. Price elasticity of demand for butter is therefore approximately

- a -2
- b -0.5
- c 5
- d 10

9. If the demand is elastic and the price is cut, total revenue will

- a increase
- b decrease
- c remain unchanged
- d increase or decrease depending on the slope of the demand curve

10. At the point at which the elasticity of demand is unitary, on the negatively sloped demand curve, marginal revenue is

- a negative
- b positive
- c zero
- d rising

11. If the elasticity of demand for electricity is 0.4, then a 40% increase in its price will lead to

- a a 10% reduction in quantity demanded and a fall in spending on electricity
- b a 16% reduction in quantity demanded and a rise in spending on electricity
- c a 10% reduction in quantity demanded and a rise in spending on electricity
- d a 16% reduction in quantity demanded and a fall in spending on electricity

12. Demand for a commodity is said to be **inelastic** if

- a total revenue falls with a decrease in price
- b $0 < (\% \text{ change in quantity demanded} / \% \text{ change in price}) < 1$
- c marginal revenue is negative
- d all of the above

13. If the demand for potatoes is inelastic (in the relevant price range), a bumper crop of potatoes will

- a reduce the total income of potato farmers
- b increase the price of potatoes
- c increase the total income of potato farmers, but by a smaller percentage than the increase in the crop
- d reduce the quantity demanded
- e none of the above

14. If a straight line demand curve shifts to the right, its slope remained unchanged, will the price elasticity (ignoring the sign) at given price

- a rise
- b fall
- c stay the same
- d react unpredictably

15. Which of the following goods would be most likely to have an income elasticity of demand greater than 1

- a wine
- b cigarettes
- c white bread
- d heating

16. A 10% increase in income leads to a 15% increase in the demand for wine. The income elasticity of demand for wine is therefore approximately:

- a -5
- b -1.5
- c 15
- d 1.5

Short Answer Questions

1 Define price elasticity of demand

2 How is price elasticity of demand measured?
